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EDITORIAL**T.V. AS SHE IS SEEN**

Radio Amateurs recently returned from abroad have given us some interesting reactions to T.V. as practiced in U.K.

England, with its 40 odd million people, is fed with a single channel of what we would call "A" class T.V. Recent events over there indicate the trend towards mixing in a flavour of "B" class or commercial advertising.

Wave propagation at T.V. frequencies gives comparatively short-range results. The problems of the T.V. technicians in this very large country of ours will be great. As we have read, marked, learned and mentally digested, we see the design for T.V. here as a single channel National Station using an amount of time which finance will allow for "A" class productions. The balance of the time may possibly be sold to "B" class stations for advertising and what-have-you. Viewers would benefit greatly by the competition created. Let us hope such an idea would not be ultra vires the Commonwealth Constitution for it is sound both economically and technically.

The U.K. Amateurs have a privilege we are striving to establish for the Australian Amateur. Over the frequencies of 420-5,850 Mc. and 10,000 Mc. are available to Amateurs

individually and collectively. Numerous T.V. clubs have developed their own T.V. propagation; so also have some individuals. The enterprise of some of the Radio Amateurs here in Australia is not less than that of his brother Amateur in U.K., although in Australia we are going to find it hard to obtain suitable gear for use at 420 Mc. and higher. This suggests the allocation of frequencies around 148 Mc. for our use, subject of course, to a strong but impartial control of T.V.I. The people of this country want T.V.; they will get T.V., even though for the moment perhaps it cannot be afforded. They will also surely get T.V.I.; such T.V.I. will not all emanate from Amateur transmitters either, except possibly from a few of the "not-so-careful" variety.

The authorities must grant us our rightful place in the T.V. planning now in process; the ability to spend our own capital; to go on the air and experience the intricacies of T.V.

It is difficult to estimate the direct and indirect value to the Nation of encouraging us to work on this highly technical development. Stifling our enterprise and initiative could easily prove to be tragic. Therefore let the encouragement we deserve be displayed by giving us our place "on the air with T.V."

—FEDERAL EXECUTIVE.

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A Special Multiband Antenna

BY HANS J. ALBRECHT,* VK3AHH

It is well known that the antenna is the most important component at any transmitting station. Its type and construction may enable us to gain quite considerable power in certain directions. It is relatively easy to obtain a maximum field intensity in one direction in one restricted frequency range, as for instance one Ham band.

This is usually done by combining several half-wave dipoles in a collinear or parallel array with the corresponding phase differences which are either obtained by mounting parasitic elements in the correct distance or by using driven elements in the correct distance and driven in the right phase with respect to the main element. Such systems are normally called "beams." If the array can be rotated, mechanically or electrically, a well-performing antenna is obtained—but only for one band, because (i.) the phase relation of all rays originating at each element and arriving at a distant point is changed as the operating wavelength is altered and thus the radiation pattern is different, and (ii.) a considerable mismatch occurs in a flat transmission line when the band of operation is changed. Moreover, beams of such a kind become impracticable on frequencies below 14 Mc. because of their physical dimensions.

Thus ordinary wire antennae are still very common for multiband operation. They can be used on all bands in harmonic relation, as is generally known, if resonant transmission lines are employed. The length may be made fairly long compared with the operating wavelength if enough space is available and thus the antenna can be

directive with considerable gain in its main lobes with respect to the intensity of a reference radiator, i.e. the isotropic radiator or half-wave dipole.

Beside a satisfactory directivity in the horizontal plane, an antenna for DX work should have a low vertical angle of radiation to secure favourable reflection conditions at the ionospheric layer. On the other hand, it must be remembered that radiation with a vertical angle below about three degrees is generally lost because of ground losses.

In the following, the writer wants to describe a special type of long-wire antenna, particularly designed for DX work on all bands lower than 30 Mc. and general communication on 7 and 3.5 Mc.

Its main features may be listed as follows:—

- (1) The radiation is concentrated in a low vertical angle with several main lobes in the horizontal plane.
- (2) The directions of the main lobes may be changed by operating a simple switching device, maintaining the low angle of radiation.
- (3) The gain at low vertical angles is considerable in the main lobes.
- (4) The single components of the complete antenna may be combined in various manners so that almost all directions may be covered on all bands lower than 30 Mc. and higher angles may conveniently be obtained below about 8 Mc.
- (5) The antenna does not require much space and the cost of its construction is negligible compared with that of a beam system.
- (6) Its operation is simple and no critical adjustment is required.

GENERAL DESCRIPTION

The antenna consists of a horizontal section and a semi-vertical one. Each section is 67 feet long, thus a full wavelength on the 20 metre band, which we shall take as the reference band for this description. Two poles hold the horizontal portion at a height of about 30 feet, while the semi-vertical section slopes down at an angle of about 26 degrees (with respect to ground) as shown in Fig. 1. The bottom end is held about one foot above ground by means of a small post. Both portions are of course insulated at both ends and at their junction which is the feeding point.



Fig. 1.—Layout of Antenna.

The feeder used at the writer's station consists of two separate tuned open-wire lines, each of which is supplying power to one section. A so-called triple-wire feeder may, however, be substituted without affecting the final result. (Such a triple-wire feeder is often used with centre-fed full-wave antennae in order to change the phasing relation between both sides and thus the radiation pattern.)

The separate feeder lines or one triple-wire feeder allow both sections to be used separately or both combined and fed (a) in phase, or (b) 180 degrees out of phase.

The length of the feeder has to be such that it operates as a resonant open-wire line on all bands desired. Thus the lines were made about 34 feet long, i.e. a quarter-wave on 7 Mc. (The use of longer lines is impracticable at the writer's station, but in spite of this, the antenna works, of course, on 80 metres for general communication.)

Fig. 2 shows how the different phase connections are obtained at the antenna coupling unit which is of ordinary

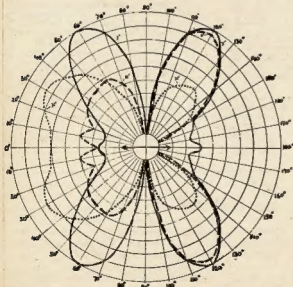


Fig. 5.—Pattern when both sections are fed in-phase.

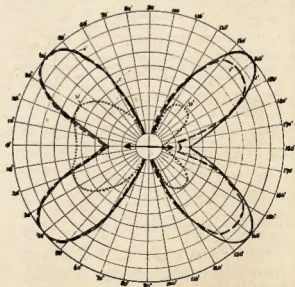


Fig. 6.—Pattern when both sections are fed out-of-phase.

* 10 Belgavia Ave., Box Hill North, E.12, Vic.

construction for both series and parallel feeding and therefore does not require any further description. As indicated, only the external feeder wires, i.e. those being connected to the sections directly, are utilised in the in-phase connection which is illustrated by Fig. 3. The two inner conductors are not used in this phase connection.

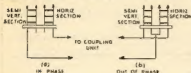


Fig. 2.—Connection of feeder lines at the antenna coupling unit. (a) In-Phase; (b) Out-of-Phase.

If, on the other hand, out-of-phase operation is desired, both outer wires are tied together and connected to the hot side of the coupling circuit, while the two inner conductors are also tied together and form, in such a way, the other conductor of the combined feeder. Fig. 4 shows how the desired out-of-phase condition is thus obtained. Single operation of any of the two sections is of course carried out in the normal manner and does not require any further comment.



Fig. 3.—In-Phase Condition.

RADIATION PATTERNS

The 20 metre band radiation patterns of the complete antenna were theoretically calculated by the writer for both phase connections. The theoretical results were proved by numerous antenna tests with stations situated in all possible directions and Continents. If any of the two sections is operated separately, the patterns are approximately those given in any handbook for full-wave antennae (with respect to 20 metres). (It must, however, be remembered that in the case of a semi-vertical full-wave antenna, the low angle of radiation is increased substantially in some directions which can be realised by considering the pattern of the original horizontal full-wave antenna to be a solid one. It may here be mentioned that the conversion of a horizontal full-wave end-fed antenna to a large improvement in its DX performance.)



Fig. 4.—Out-of-Phase Condition.

Figures 5 and 6 show the radiation patterns computed for both phase connections of the complete long-wire. The semi-vertical section is always situated toward the left-hand side of both figures. Each pattern is given for three vertical angles of radiation, namely for 5, 10, and 30 degrees. It is obvious that the patterns for 5 and 10 degrees are those of greatest interest

for DX work. It may be seen that in both phase connections the intensity is compressed in low angles of radiation. The fact that the 30 degrees pattern is usually of lower intensity indicates that clearly.

Fig. 5 shows the pattern when both sections are fed in phase while the out-of-phase connection is represented in Fig. 6.

Comparing both diagrams, we clearly notice the change in the directions of maximum intensity in the horizontal plane. Thus different directions may be covered by changing the phase connection, while the favourable low angle of radiation is maintained. An intensive

main lobe in the direction of the wire may be obtained by using the semi-vertical section alone.

As the frequency of operation increases, i.e. on the 21 and 23 Mc. bands, the directions of maximum intensity tend to approach the direction of the wire. The pattern for 40 metre operation is in the in-phase connection that of "two half-waves in-phase," i.e. a sharp lobe perpendicular to the direction of the wire, and for the other phase connection we have a slightly distorted pattern of a full-wave antenna. Patterns for single operation of each section are self-explanatory.

(Continued on Page 8)

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The 1953 Urunga Convention

W.I.A. National Field Day, 1953, Results

It is now Tuesday, 7th April, and for many, the 1953 Urunga Convention has ended, but for those remaining at the scene of the activities, peace and quiet will have begun to reign once more.

Attendance this year was not as high as in 1952, but I feel certain that the fellowship amongst those present was enhanced rather than diminished by the lack of numbers. In all, 35 call signs, 7 associates, and 15 relatives or friends were registered, a grand total of 57.

It was very pleasing to see the attendance of the N.S.W. Division President, John 2JU, and Hon. Sec., Dave 2EO. John had a very enjoyable time and was last seen stripped to the singlet and shinning the rafters in the "Do Me" shack whilst Jean Dan kept his famous pipe in production. Dave also had a wicked gleam in his eyes and some of the stories he told would make even Satan blush! The "Iron Horse," George 4GG, was again present and many old acquaintances were renewed and new ones made. Also Jim 4PR re-acquainted us with our old friend, Pedro the bandino.

Apologies were received from many including Hart 2JC, Russ 2WT, whilst Dave 2AYE sent a radiogram from aboard the S.S. Manoroa at sea advising that he had resigned the "Consulship" of Bondi and was now contemplating taking out a VK6 call sign. Letters were also received from "The Monitor," Fred Leader, of New Zealand, wishing the Convention every success and passing 73s to all present.

No Convention can of course proceed smoothly without good organisation which provides for quick action when the unexpected arises, and the work put in by various people to this end is probably not generally realised. All those present will, I am sure, be pleased to acknowledge the efforts put in by 2XO, 2ACU, 2FH, 2AVG, 2NX, Jean Dan, Jean Retallick and their helpers in turn whom they called on from time to time.

Many things happened behind the scenes which will probably never be told, but without which the Convention would not have been the success it proved. I know of some of the things, others other things. Collectively they made for the smooth running of the gathering, and I can assure all readers that the extensive work and personal inconveniences undertaken willingly by the organisers and their helpers was for one purpose only, to make the Convention successful for their fellow radio operators and their guests.

The lack of registration this year did not give the Convention a clean balance sheet, but some very generous donations squared the budget. Naturally this state of affairs is not desirable and it is hoped that 1954 Convention will be on a sounder footing financially. It is doubtful if the '53 Convention could be exceeded for friendship or enjoyment and the same fellowship will be available in 1954. The Committee is hoping that more fellows will avail themselves of the good times to be had next Easter.

The following is a list of those whose names appear on the official registration sheets. There were other folk who visited the Convention for short periods, but did not register due to the briefness of their stay:

George 4GG, Yarraman; Tom 4PD, Brisbane; Jim 4PR, Brisbane; Leith 2EA and Merrin; Kangaroo Creek; Dave 2EO, Sydney; John 2JU, Sydney; Alan 2FH, Sydney; John 2GA, Woy Woy; Hart 2JC and Elsie, Narrabri; Jack 2JK, Coff's Harbour; Ken 2KG, Newcastle; Cec 2KR, Woy Woy; Shorty 2NX, Newcastle; Keith Harland, Newcastle; Varley 2SF, Newcastle; Bruce 2SN; Alf 2UC, Lismore; Stan 2UY, Newcastle; Cries 2XO and Jean, Raleigh; Bill 2XT and Mrs. Hall, Newcastle; John 2AF, Sydney; Alec 2ABU and Jean, Sydney; Ted 2ACD, Sydney; Rod 2ACU, Coomang; Jack 2ADN and Shirley, Coff's Harbour; Martin Hunt and Bonnie Wheatley, both of Coff's Harbour; Bill 2AEY, Taree; Alec 2AGG, Sydney; Harold 2AHA and Joyce, Mrs. Whyte, Snr., and "Pop" Whyte, Newcastle; Ken 2AJT, Ballina; Ron 2ASJ, Newcastle; Don 2ASW, Sydney; Ted 2AVG, Sydney; Bill 2AWG, Coff's Harbour; Harold 2AWH; Ken 2AXZ, Sydney; and Associates Gordon and Eunice, Gilmore, of Lismore; Les and Norma Sparr, Newcastle; Norm Dash, Kempsey; Bill Mitchell; Syd Daniels; Webb Cooper, Armidale; Harry Knight, Coff's Harbour.

There were others present whose call does not appear on the official list and included 2PA, 2QV and probably others not known to me, whilst others including Ken 2APB called in for a few hours as time or work permitted.

The competitions were conducted under the supervision of a central control station and were smooth in operation. Average number of entrants was eight and performances were greatly aided by the reasonable condition of the bands and the friendliness of the competitors. The results were:—

- (1) The Gerry Challenger Memorial Contest: 1st, Don 2ASW, 194 pts; 2nd, Peter 2PA, 155 pts; 3rd, Harold 2AWH, 135 pts.
- (2) The 144 Mc. Hidden Tx Hunt: 1st, 2PA/2AHH (as a team); 2nd, 2AHA; 3rd, 2NX.
- (3) The Fred Leader 144 Mc. Hunt: 1st, 2AEY; 2nd, 2AHH/2PA; 3rd, 2KG.
- (4) The Urunga Scramble: 1st, 2ASJ, 40; 2nd, 2AWH, 39.
- (5) Best drawing room story, the "old horse," 4GG; (6) Ladies' mystery voice comp., Jean Dan; (7) Ladies' quiz comp., Marie Hunt; (8) Ladies' house comp., Marie Hunt; (9) Ladies' lucky door number, Marie Hunt; (10) Gents' lucky door number, Leith 2EA.

Everybody, I'm sure, will join with me in extending congratulations to Ron 2ASJ on his popular win in the Scramble and all will agree that 40 contacts in an hour is really good going and Ron really deserved his victory.

Before closing, the Convention's thanks must be extended to Ted Hamey who, with his usual enthusiasm, brought his projector and films from Coff's Harbour to give us a glorious insight

The results of the 1953 National Field Day are published herewith and although only 17 logs were submitted, the Contest was more popular than in past years, as in addition to the logs submitted at least 15 other portable stations were in operation.

The winner of the Open and Phone Sections was VK2ASW with very creditable totals of 280 and 239 points respectively. The C.W. winner was VK2ASJ and Fixed Station VK3AHH. State winners to whom Certificates will be issued include: Open—VK3ALQ, VK7SR; Phone—VK3LN, VK7FM; and C.W.—VK3YS.

OPEN SECTION

	Points
VK2ASW	280
VK2ASJ	225
VK3ALQ	206
VK7SR	150
VK3YS	62
VK3ZM	23
VK2RK	6

PHONE SECTION

	Points
VK2ASW	239
VK3LN	159
VK2ASJ	113
VK3AID	49
VK7FM	26
VK7AL	23

C.W. SECTION

	Points
VK2ASJ	163
VK2ASW	181
VK3YS	56

FIXED STATION SECTION

	Points
VK3AHH	28

—Federal Contest Committee.

into the growing and marketing of Flowers in Holland. To our entertainers from Bellingen we also owe our thanks, as we also thank Betty Sara (Mrs. 2QV) and Ina Alexander (Mrs. 2PA) for their lovely singing.

The people of Bellingen Shire and the township of Urunga in particular made us all feel at home and we thank Councillor Raymond and Mrs. Cooper for their kind words of welcome.

Donors of prizes, etc., are all thanked for their generosity and any who played a part in the smooth running of the Convention for the benefit of all those who had the pleasure of attending.

Quite a few humorous incidents occurred some of which would take time long to tell, and others too numerous to mention. If you want to hear some of them, ask Crieff about the stories on the tape recorder, Peter 2PA of his adventures water ski-ing, Don 2ASW about his adventures with Yvonne, Rod Pike and his bolis, Alec Dan and his motor scooter, Pedro 4PR and his motor scooter trip from Brisbane to Coff's Harbour, John Moyle about Dorrigo Mountain. All these things, as you know, make up life at its best and I can only say to those who weren't there—be there next time.

—Noel Hansen, 2AHH.

Waltham

DISPOSALS!

RADIO TRANSCEIVER AND INDICATOR UNIT V.H.F. Approximately 180 Mc.

Type 1045. Valve line-up in Transceiver: 2—RL18, 1—VR135, 1—5V4, 1—EA50, 1—RL37, 6—EF50, 1—6SN7, 1—GL2050 (Thyatron), 2—VR150/30 (Voltage Regulators), 1—884 (Gas Triode). This unit also contains a motor driven Selector Switch, two superbly designed Polystyrene six-position rotary Coil Turrets, and an I.F. Transformer strip ideally suitable for use with Television. Band width 10 Mc. Indicator Unit, Type 1047. Valve line-up: 7—EF50, 1—879, 1—VR54. Also contains a 3,000 type Relay 2,000 ohms, ten assorted Potentiometers, a two-bank Ceramic Wafer Switch, and an illuminated scale (5BP1 tube and shield not included).

These two Units are brand new, and are packed together in their original packing cases.

PRICE £21/10/- the two.

Transceiver £15/0/0 } if supplied separately.
Indicator Unit £7/10/0 }

TRANSMITTER-RECEIVER

Type RT34/APS13, Frequency Modulator, approx. 450 Mc. Valve line-up: 2—6AC5, 5—6J6, 2—2D21, 1—VR105. Also contains Dynamotor, input 27v. 1.5a., output 285v. 60 Ma. Price £17/10/-.

TRANSMIT. CONDENSERS

50 pF. two-gang £2/10/-

B.U.D.

50 pF. Midget Dual £1/17/6

50 pF. Single, Junior £1/5/-

18 pF. Single, Junior £1/10/-

25 pF. Dual Junior

U.H.F. £2/10/-

35 pF. Single gang Dual

Spaced 17/6

33 pF. max., 4 pF. min. Neut. Condensers, plate gap 0.078 inch £1/10/-

Feed Through Neut. Condenser plate dia. 1.27/32 inch £1/5/-

80 pF. per Section, Dual Junior £2/10/-

150 pF. per Section Dual Junior £3/10/-

200 pF. per Section, Dual Junior £3/10/-

Post. & Pack. Vic. 4/-; N.S.W. S.A. Tas. 5/-; W.A. Qld. 6/-

COMMAND RECEIVERS

BC453 190-550 Kc. £12/10/-

BC454, 3-6 Mc. £7/10/-

BC455, 6-9.1 Mc., £7/10/-

COMMAND XMITTERS

BC457, 4-5.3 Mc. £7/10/-

BC458, 5.3-7 Mc. £7/10/-

BC459, 7-9.1 Mc. £7/10/-

COMMAND RECEIVER CONTROLS, Type BC450

3 Slow Motion Dials, 6 Single pole double throw Switches, 4 Miniature Jacks, 3 Volume Controls (approx. 5,000 ohms). Price £1/15/-.

Post. & Pack. Vic. 6/-; N.S.W. S.A. Tas. 7/6; W.A. Qld. 11/-

AERIAL CONTROL BOX

Type 442A, contains 50 pF. Western Electric Condenser, Aerial Indicator Meter 0-10 amp. Thermo-couple, 24v. miniature Relay, and useful connecting terminals. Price 25/-.

Post. & Pack. Vic. 3/6; N.S.W. S.A. Tas. 4/-; W.A. Qld. 4/6

MODULATING UNIT

Type 169, containing Klystron Tube, three Neon Stabilisers, one EF50, two half-wave Selenium Rectifiers, one 5U4 Rectifier, one CV85, Potentiometers, gears, Resistors, high voltage Condensers and Transformer. Price £4/19/6.

319-321 SWANSTON STREET
393 FLINDERS STREET, MELBOURNE

Address all Correspondence to Box 5234, G.P.O., Melbourne.

Write for our latest Bargain Catalogue.

DYNAMOTORS

Westinghouse, input 24v. 7a., output 540v. 250 Ma. Price £2/10/-.

Post. & Pack. Vic. 7/3; N.S.W. S.A. Tas. 10/6; W.A. Qld. 14/-
Bendix, input 24v. 13a., output 300v. 260 Ma. 150v. 10 Ma. 145v. 50 Ma. Price 23/6.

Western Electric, input 24v. 1.1a., output 250v. 0.06a. Price 32/6.

Post. & Pack. Vic. 4/6; N.S.W. S.A. Tas. 6/-; W.A. Qld. 7/6

TRANSMITTING TUNING

Units by General Electric

Type TU10B, 10,000 to 12,500 Kc. £2/10/-

Type TU7B, 4,500 to 6,200 Kc. £2/10/-

Type TU6B, 3,000 to 4,500 Kc. £3/10/-

Type TU9B, 7,700 to 10,000 Kc. £2/10/-

Post. & Pack. Vic. 4/6; N.S.W. S.A. Tas. 6/-; W.A. Qld. 7/6

CONTROLLER, TYPE 4

Aircraft Transceiver remote control. Containing a 5-bank cancelling push-button switch, lock and non-lock; P.M.G. type Key Switch, small two-way Plug, and five small bezels and lamp holders. Price 17/6.

Post. & Pack. Vic. 4/6; N.S.W. S.A. Tas. 6/-; W.A. Qld. 7/6

SELENIUM RECTIFIERS

300 volt 80 Ma. 12/6

200 volt 40 Ma. 8/6

Post. & Pack. Vic. 3/6; N.S.W. S.A. Tas. 4/-; W.A. Qld. 4/6

TRANSISTERS

Type TR3548

Containing Valves: 1 Rectifier VU11, 1 EF50, 1 10 Cm. Magnetron Valve complete with magnet, 1 Crystal Diode Type 1N21; and 1 24v. Blower Motor. Brand new. Price £5/19/6.

HAND GENERATORS

Gibson Girl Hand Crank Generators. Output: high voltage 250v. 100 Ma., low voltage 6-8v. 2 amp. Ideal for conversion to power supply for portable transmitter. Also suitable for conversion to Wind Battery Chargers. Price £4/10/-.

Post. & Pack. Vic. 5/-; N.S.W. S.A. Tas. 6/-; W.A. Qld. 8/6

COMMAND MODULATOR UNIT, Type BC456E

Containing 1—12J5, 1—16Z5, 1—VR150/30, 3—24v. Relays. New condition. Price £5/-

ASB TRANSISTERS

Containing six Acorn type Transistors, high voltage vacuum Relays, and many other useful components. Price £3/17/6.

ASB RECEIVERS

800 Mc. approx.

Valve line-up: 2—955 (Acorn triodes), 8—6AC7, 1—655, 1—6H6. Also contains eight H.F. I.F. Transformers and 0.001, 0.003 uF. mica condensers. Price £6/19/6.

BENDIX RADIO AZIMUTH CIRCLE LOOP AERIAL CONTROLS, Type MN22A

Price 35/-.

Post. & Pack. Vic. 4/6; N.S.W. S.A. Tas. 6/-; W.A. Qld. 7/6

CRYSTALS

500 Kc., mounted on panel with various other useful components. Price £1/10/-.

Post. & Pack. Vic. 3/6; N.S.W. S.A. Tas. 4/-; W.A. Qld. 4/6

METERS

Special Offer. Three R.F. Meters, amp. or milliamper, various ranges, all in good condition. Useful for conversion and re-calibrating. Three for 22/6 Post Free.

HEADPHONES

Low Imped. 500 ohms, 12/6
High Imped. 2000 ohms, 25/-

Post. & Pack. Vic. 3/6; N.S.W. S.A. Tas. 4/-; W.A. Qld. 4/6

STABILVOLT. VALVES

280 volt, 80 Ma. 25/-
280 volt, 40 Ma. 20/-
150 volt, 20 Ma. 15/-
150 volt, 30 Ma. 15/-
150 volt, 15 Ma. 10/-
EF50 12/6
VT61 10/-
6A6 10/-
1204 R.F. Pentode, 6v., complete with socket 3/11
Postage & Pack. All States, 5/-

DX NOTES BY VK7RK*

Activity this month seems to be hitting the low spots, reports coming in being very few and far between combined with my own comparative inactivity making it somewhat difficult to make the column interesting. To those who did find the time to drop me a line, let me say "Many thanks," and to those who could not, "I could do with it."

One point worth considering is that by the time this reaches you we will have completed our first year of 21 Mc. operation and it is interesting to recall how the band has behaved. In all it has been everything that could be expected of it, taking into account current conditions, and gives promise of really first class working at a later date. At appropriate times, most continents have been worked with ease, South America being the stumbling block and the only QSO I have a record of is VK2AWU to CE. Others have no doubt a South American QSO under their belt but not many.

Those of you who heard and worked VQ4HJP around last September will have no doubt as to the African contacts available, while the pile of Europeans during evenings in October, November, and December give the pointer for this continent. At the moment we are back where we started with some fine ZL contacts and occasional W and Central Americans. However, to summarise the bands for the month:

3.5 Mc. came to life with a bang during the WVE Contest, which bears out the old, old contention that with sufficient activity conditions are not nearly as bad as they seem. 3AHH was indicative of quite a few of the gang in working all W districts. Heard with a consistently strong signal, but of course not interested in working VKs, was KP4KD.

7 Mc. bore the brunt of the WVE working being consistently good from 0630z to 1600z. Europeans are still good by losing a few hours of the morning sleep. Calls heard here include G, F, ON, HB9, YU, EA2DM, EA7DW, CT1EL. Don Granley heard most of his Europeans over the long path and takes HIDSU, YU2AKL, CT1DJ, GW3AKB, UBSKAB, EA1BE, MB9CA, OE13HL, UA1KAC, UA0BK, FA8CR and FK8BD. On phone everyone seems to have worked the Ws and to these 4XJ adds FUSAC and 3AHH adds HC1FG and LUSAL.

14 Mc. at the moment does not bear predicting as it changes so rapidly. An example of this was given here on two successive afternoons. The first one, between 0600z and 0615z all continents except Europe were at good strength, prefixes being ZS, SU, W, VE, K17, CO, KZ5, HR, CE, JA, and FK8. The following afternoon at exactly the same time the only DX audible were Europeans and they were there in abundance, so how would the prediction service explain that away?

9YX comes up with a very interesting letter and seems to have kept himself extremely busy during the month working DL1DX, OE1CD, F8BS, SM7AVA,

OE13HL, OH2NE, OZ3JB, DU1CV, KG6ABI, VU2AR, ZS1EB, ZS3OH, ZS2CR, ZS5KU, CR7BC, VK1RR, KZ5GH, CE4MX and a host of Ws. You don't think that would keep him busy for the month? Well let me tell you guys, Alan managed to squeeze in enough time also to get himself an XYL, so if that's not being busy, I don't know if. Anyway, congrats Alan and maybe this time next year you will be able to check on DX during the wee small hours.

2AOU comments that as we are just about at the bottom of the hill in sunspot activity, things can't get much worse, but Hans seems to be getting along with quite a few stations, working KG6AEJ, DL1HL, KA3RR, VS6CL, VK9RC, SSM5WL, SSM5AC, IISM all on phone, and heard (on phone): HR1BG, VS7RA, VU2NB, CN8EY, VS1ES, VS6CG, CT1CP, KW6BI, K17ZG, HR1KS, KX6BB, ZM6AA, and KT1WX. Hans summarises the band by saying the Ws from 0500-0700z, Central Europe and down to North Africa 0700-0830z, while 1000-1100z is still best for Northern Europe. 3AHH lists the usual run on c.w. plus KP6BI and VE8TC, and on phone HR1BG, FO8AI and XZ2SS.

MF2AE provided the only new one for 7RK, the new ones come very slowly now. Others for the month were CO2OE who puts in perhaps the strongest signal from Central America, and FK8AE, VS6CG, CR9AF, FO8AI, KJ8AX, KM6BG, ZS2BC, HR1AT, KZ5FI, ZS2HI, YU3BC, SU1HS, OH7OL, OH5NK, SSM5AH, PA0SP. On phone, ZM6AA and VS1ES.

21 Mc. has been commented on up the page a little and if you have patience enough to listen more often, some good QSOs will reward you. 3AHH lists on c.w. apart from ZLs VR2CG and VS1FE; on phone, KH6YL and VSABE. 7RK heard on phone KH6AR, TP2VF, HP3FL—the latter two at 0100z. HP3FL runs 500w. to a vee beam pointed in our direction. 2AWU beat me to the contact, so Walter is evidently still watching 21 Mc. Apart from some very strong ZL signals on c.w., an occasional W, usually W6 or W7, can be heard around 0100z.

28 Mc. seems still to have had the biscuit, but nothing daunted, up pops 4XJ with KH6AGY, KH1SP, KH6AOR, KH6UL and WSULH/MM.

A few QSLs seem to be trickling through, to 3AHH: 5A3TZ, MB1LK, to 9YX: DU1CV, FO8AB; to 7RK: SU1EG, ZS6YW, 4UAS, YU3AT, DU1GC, YJ1AB, VQ4HJP, ZC4RH, OH5NK, the last three on 21 Mc. 7GM received a QSL from W1WHR for a QSO in June, '48, post-marked the same time. At that time there was no 7GM licensed and Gordon comments on the efficiency of the QSL Bureau waiting for a call to be sent out and then sending him QSLs back for a few years.

Two QTHs to mind are: MF2AE—Box 5, Trieste; KJ8AX—A.P.O. 105, c/o P.M., San Francisco.

Last month's note re Cocos Island finished up a little haywire as to call sign as I discovered just one day after posting. The new call on Cocos is

VK1BJ, Jeff, ex-VK6JC, operates mostly by phone, when I heard him around 14180 Kc. Time at the moment very limited and hopes to spend most of his time on 21 Mc. when he gets that perking which he expects to be about June. Cocos Island time is 3½ hours behind E.A.S.T.

AMATEUR CALL SIGNS

FOR MONTH OF MARCH, 1953

ADDITIONS

- VK—New South Wales
- 2CD—Chapman, R. O., 67 Arabella St., Longueville.
- 2EK—Taylor, A. F. W., 13 Maxwell Rd., Pagewood.
- 2A1C—Clocker, H. W., 68 Belembs Ave., Lakemba.
- 2A2D—McPhee, R. B., 1 Hampden St., Dubbo.
- 2A2E—Hawkins, D. K., 12 Broad St., Meadowbank.
- 2A2U—King, J. S., 19 St. Paul's Rd., Balgowlah.
- 2AVO—Crichton, J. T., Flat 3, Phillip Court, 29 Horne St., Forster, New South Wales.
- Victoria
- 2AU—Gabel, H. F., 95 Glenhuxley Rd., Elwood.
- 2PN—Perrin, A. M., 6 Brings Ave., Camberwell.
- 3RM—Esternbrook, R. W., Turner Road, Upway.
- 2ADD—Daniel, H., 11 Flinders St., Mitcham.
- 2AEN—Semmens, G. R., Postal: 19 Valley View Rd., Glen Iris; Station: Main Road, Clematis.
- 2AFQ—Smith, W. S., Rogers Rd., Moorabbin.
- 2AFS—Powell, L. A., 70 Jackson St., Casterton.
- Queensland
- 4ZM—F. B. Bond, Boundary Rd., Rainworth, Brisbane.

Western Australia

- 6CC—Chapman, F. W., Lot 420, Downey Drive, Manning Park.
- Tasmania
- 1AX—Hubbard, A., 2 Athleen Ave., Lenah Valley, Hobart.

ALTERATIONS

- VK—New South Wales
- 2A1F—30 Delecta Avenue, Beauty Point, Mosman.
- 2A2B—Coca Road, Northbridge.
- 2M2—"Mount Haven," Essex Street, Lawson.
- 2PI—31 Hackett Gardens, Turner, Canberra.
- 2AD—Chas. W. Registration Sanatorium, Turramurra.
- 2AEM—Heathwood Avenue, Lavington.
- 2A1J—203 Stewart Street, Bondi Junction.
- 2A1N—The Rectory, Cammock.
- Victoria
- 2BB—14 Langford Street, Morwell.
- 3C0—43 Stewart Street, Seymour.
- 3GE—3 Graham Road, Carrum.
- 3Q0—122 MacAllister Street, Sale.
- 3HD—4 Arkingdon Crescent, Black Rock.
- 3JC—19 Talbot Avenue, Burwood, E.S.
- 3M2—3 Barnes Grove, Chelsea.
- 3QY—Base Squadron, R.A.A.F., Point Cook.
- 3QZ—Railway Avenue, Northcote.
- 2KU—48 Murdoch Road, Wangaratta.
- 2AC0—43 Stewart Street, Seymour (Portable).
- 2A1C—119 McCrae Street, Dandenong.
- 3AOC—Scenic Road West, Warragul.
- 2A8T—67 Nunn's Road, Mornington.

Queensland

- 4BW—Lloyd Street, Mareeba.
- 4TS—Station: 23 Wyllie Street, Toowoomba;
- Postal: 18 Minns State School, Mt. Isa.
- 4UX—Oak Street, Ungaburra.

Yukon, Alaska

- 3PB—Thomas Street, Murray Bridge.
- 3DE—Station Master and Postmaster, Copley.
- 1L3—137 Walkerville Terrace, Walkerville.
- SVL—Box 12, R.A.F. Station, Darwin.

Western Australia

- 6EB—203 The Strand, Bedford Park.
- 6FA—C/o A.W.A. Aviation Service, Derby.
- 6RUC—119 McCrae Street, Dandenong.
- 6RT—School House, Nungarin.
- 6UT—57 James Street, East Cannington.

Tasmania

- 1UD—29 Brent Street, Glenorchy.
- 7KB—117 Linton Street, Upper Burnie.

DELETIONS

- New South Wales: VKs 2JS (now operating under VK3RM), 2AKZ, 2APO (now operating under VK3APQ), 2AQL, 2ASG, 2ABV.
- Victoria: VKs 2JL, 2JN.
- Queensland: VK4BE (now operating under VK2ZJ).
- Tasmania: VKTWT.
- Territories: VK1FN (now operating under VK3FN).

* 5 Galvin Street, Launceston, Tasmania.

FIFTY MEGACYCLES AND ABOVE

Compiled by J. K. RIDGWAY, VK3CR.

VICTORIAN DIV. V.H.F. GROUP

Once again excellent weather prevailed for the field day on 15th March. On 2 mhz over 20 stations were active in Victoria as well as a number in N.S.W. and northern Tasmania. Country stations 3BQ, 3UJ and 3ZL were set up with portable gear on Tower Hill, Mt. Major and Mt. Buninyong respectively. Metropolitan stations working portable were 3JO at Mt. Bullengarook, 3NW at Ringwood, 3ADU at Mt. Macedon, 3ABA at Mt. Hickey, 3LN at Keilor, 2PN and 2BQ operated from "The Granites" near Kyandra, N.S.W. They made contact with 3UJ, and 2PN was heard by 3ADU and 3ABA. Most portables had a good quota of QSOs, 3ZL making 19. Country home stations on were 3JK Wanganatta, 3APF Shepparton, 3UG Rye, and 3ABE of Lower Macdonald; while in the Geelong and Queenscliff areas, 3AKE and 3BW came on.

Have you sent in your log for the contest? Please note that logs should be posted to reach the Victorian Division rooms before 7th May. Log requirements and contest rules appeared in the Dec., '52, issue of "A.R."

At the March V.H.f. Group meeting the office-bearers for the ensuing year were elected and are: Chairman, Herb Stevens, 3JO; Vice-Chairman, Fred Ball, 3YS; Secretary, Jim Gale, 3AJG; Asst. Secretary, Bob Stevens, 3OJ; Publicity Officer, Jim Ball, 3ABA.

The next V.H.f. Group meeting is on 20th May at 8 p.m. in the Institute Rooms and Mr. Andy Morrison of the P.M.G. Research Department will give a lecture on the 167 Mc. tests across Bass Strait. He will describe the tx, rx, recording equipment and aerials

being used. It is anticipated that the prizes will be presented to the winners of the v.h.f. field day contest. All are invited to attend the meeting.

Country v.h.f. activity is improving. In that outpost of Victorian civilisation, Mildura, in the Far North West Zone, 3GZ and others are getting down on to 144 Mc.

On 288 Mc. the following are active and looking for contacts: 3AFJ, 3ALK and 3AAF in the Ashburton-Burwood area, 3GQ at Essendon, and also 3PO in Ballarat. Some proposed activity in Geelong is reported. 3PO calls Melbourne every evening at 2000 hours for five minutes then listens for five minutes through until 2030 hours. Tx's at present are p.p. 7193 mod. osc. Super regens serve mainly for receiving. 3AAF has a modified AR301. The aerials are 16 element vertical arrays and 5 element horizontal yagis. A half wave length on this band is a little over 1 ft. 7 inches.

SOUTH AUSTRALIA

Tom 5TL has been spending holidays in the city and gathering gear and information about 144 Mc. Came out to my QTH and set a grid dip osc. on the band, so the Murray Valley should be set up now for further building. Has also a 636 tunable osc. with 7 Mc. i.f. channel ready for testing. The Valley, according to reports, has been having fun with transceivers and super regen rx's. Harry 5KW and Murray 5CF making use of the 2 mhz band also so that there should be a really good possibility for an interesting lot of work on the v.h. frequencies. Hughie 5BC still active with a 4 element rotary on

6 mhz, while Fred SMA sticks to a folded dipole.

Locally, the activity wouldn't bear comment. Ross 5FL using 6 and 2 mhz in the usual hook-up with Pete 5FM, but I think that the regular v.h.f.s must be hauling off for the winter months when according to reports we are due for some sporadic E and perhaps some DX! The weather reports and maps show possibilities for a long distance 144 Mc. contact from north to south, but so far we have few stations north of Adelaide to take advantage of the unusual cold fronts which have been occurring lately. Reg 5QR is always on the watch so what about it, Laura, Clare and Pt. Pirie—maybe also Pt. Augusta.

(Continued on Page 10)

MULTIBAND ANTENNA

(Continued from Page 3)

THEORETICAL CONSIDERATIONS

Calculations of radiation patterns of complicated antenna systems can only approximately represent the real circumstances as certain assumptions must always be made. However, careful computations usually lead to results which are sufficiently accurate for practical applications. It is helpful to regard reflections from the ground as being represented by a so-called image antenna below the earth's surface. Furthermore, all possible reflections from surrounding buildings, etc., must be neglected as they would make a calculation impossible.

There are several methods for the computation of radiation patterns. The best general approach is based upon Maxwell's equations and uses so-called radiation vectors and antenna moments for the final evaluation. A discussion of this approach would be beyond the scope of this article, but all interested may peruse the excellent book given as reference. Another satisfactory method is the use of ordinary graphical manipulation involving simple vector analysis. A simplified method of computing complicated antennae is intended to be the subject of another article at a later date.

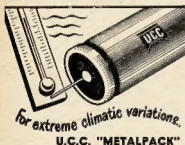
The other interesting property of any antenna is its gain with respect to the radiation of a half-wave dipole, say. This was theoretically calculated for the main lobes in the 5 degree plane with 20 metre operation. The gain was found to be 5.6 db in the in-phase connection, and 6.4 db in the out-of-phase connection.

The antenna performs very well for 20 and 40 metre DX as well as general communication on 40 and 80 metres, so that it can be recommended to anyone who is interested in those branches of Ham Radio. The description has shown that its construction is extremely simple. DX results at the writer's station improved considerably since erecting it, and the antenna was found at many occasions to perform at least as well as "beams."

In conclusion, the writer wishes to take this opportunity to thank the following stations for very helpful reports in lengthy antenna tests: VKs 2APL, 3OL, 3WQ, 3AAF, 3AVW, 7DZ; Ws 1EFN, 7PYV, 8BQP; and DL1EE.

REFERENCE

S. A. Schellum and H. T. Frits, "Antennas: Theory and Practice" (Chapter 12).



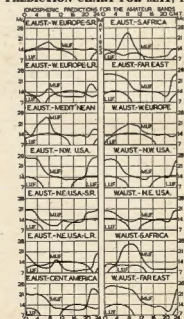
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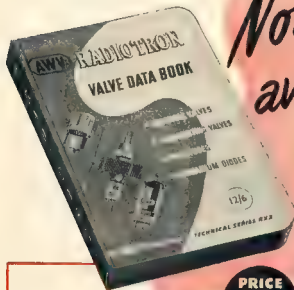
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CONVENTION DINNER

Easter Saturday evening saw a gathering at the Hotel Federal where the Federal Council entertained the Delegates as well as Departmental heads of the Post-master General's Department and the Services. The Federal President, Mr. G. Glover, presided and was most ably assisted by the Federal Secretary, Mr. G. M. Hull, VK2ZS, who acted as Toast-master.

Mr. John Martin proposed the toast to the Wireless Institute of Australia and in doing so said that in the past he had been to many such functions, but always in an official capacity. Now, however, he was extremely pleased to be able to attend as an ordinary person. He had for more years than he cared to remember, been associated with Amateurs and paid tribute to those who gave such valuable services in the course of World Wars one and two.

Mr. Geo Glover, VK3GG, in reply, expressed the view that the Institute was growing every day, and they today were engaged in consolidating the position of the Institute and the Amateur in the community.

"The Guests" was ably proposed by Mr. W. G. R. Gronow, VK3WG, who, in the course of his remarks, welcomed visitors to the gathering. He was pleased to see old friends of the Department as well as visitors from the Broadcast Control Board and the Services.

Mr. J. Dobbin responded saying how pleased he was to be present, and wished to apologise for the absence of the Director General who was unable to be present, but nevertheless had expressed his hopes for the success of the Convention.

Mr. Dobbin, looking round, said he thought that there were some "hard boiled" types attending the convention, but he was sure that much good would come of it. The P.O. was always anxious to help as far as they were able, but in these days it was getting harder and harder to make wavelength assignments as the demand had far exceeded the spectrum space. However, Amateurs were regarded as a service, and as such would always receive full consideration of any requests put forward. He hoped he would be able to attend more of these functions.

Lieutenant Colonel Roseblade, representing the Director of Signals, said he enjoyed being able to attend and welcomed the opportunity to support the remarks of Mr. Dobbin. He had been a Ham for 20 years and in that time he had met many Amateurs in the Services, where they had always proved invaluable.

Mr. Cedric Ewin, VK3AGC, Federal Treasurer, proposed the toast to the "Delegates" and in a few well chosen words welcomed the Delegates and hoped that their stay would be a happy one.

The reply to this toast was in the capable hands of Mr. J. B. Corbin, VK2YC, who, in a brief, humorous and straight to the point reply, thanked everyone concerned for such a great time. The hospitality of the VK3 Division seemed to be something unique and proved without doubt the Amateur claim that "Amateurs were friends irrespective of colour, class or creed."

Mr. R. Hugo, VK6KW, proposed the toast "Headquarters Division," saying he was pleased to have the responsibility of this toast. Headquarters Division looked after them during their stay, not only this, they had provided the Institute with Federal Executive. He thought that they in Western Australia could not do better.

The Victorian President, Mr. Gordon Dennis, VK3TF, replied and thanked the proposer for the nice remarks. The Division derived great pleasure in being able to entertain the delegates, and he thought the Convention worth while.

The toasts were followed with a very simple ceremony—that of the official presentation of the Remembrance Day Trophy to the winning Division. Mr. F. Punch, of the P.M.G. Central Administration, made the presentation, saying he felt deeply honoured to be chosen to make this presentation. The

FIFTY Mc. AND ABOVE

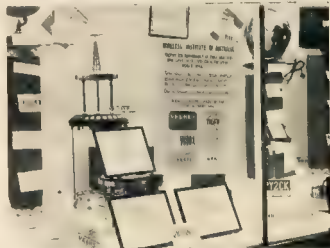
(Continued from Page 8)

From the south east comes the following news from Col Ferguson. There are five stations operating on 2 mhz. Stuart SMS, John 5JA, Claude 5CH, Tom 5TW and Col 5CJ. 5TW and 5MS are using converted I.F.F. gear as mod. osc. and super regen rx and cover the local terrain in fine style.

5CH and 5JA use converted AR301 rx's and a modified I.F.F. tx and home built xtal controlled tx respectively with spare bits and pieces of I.F.F. gear for stand-by.

Col 5CJ has an SCR522 modified to work on 2 mhz with the usual I.F.F. spare so that there should be no break down in communications in that spot of S.A. The antennae vary from "J" types to 4 element beams with a mixture of vertical and horizontal polarisation for good measure.

There is a very good article on v.h.f. converter design in February "QST" by two engineers of Television Industries Inc., U.S.A., and I am spending some well applied time to glean excellent tips from it. I recommend its reprint to the Editor of "A.R."—SKU.



The above display is portion arranged by the Western Australian Division in the window of a large store in Hay Street, Perth, to commemorate the winning of the Remembrance Day Trophy as well as to create public interest in the Institute and the Amateur generally. The W.A. Division are deeply indebted to Foy & Gibson who made the window space available and sincerely thank the staff responsible for the excellent display.

sentiment behind the trophy was of the highest—that of commemorating the memory of those Amateurs who gave their lives on active service. He had much pleasure in presenting the trophy to Mr. Ron Hugo representing the Western Australian Division.

Mr. Hugo said he had much pleasure in accepting the trophy on behalf of his Division, which they had won after much effort. He thought, as Mr. Punch expressed it, the thought behind the trophy inspired the effort to win, and he hoped that his successor would be very proud to accept it next year.

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ERRATUM, VK-ZL CONTEST RESULT

In the Aus. C.W. Section, the call sign "VK3AAH" should read "VK3AHH."

IT DID HAPPEN IN ENGLAND

Two and a half years ago the R.S.G.B. offered to set up a communication network to meet any national disaster on land, at sea, or in the air. That offer was declined. Why? Because the G.P.O. had advised the appropriate Ministry that it was quite capable of handling any emergency without the help of Radio Amateurs.

It is worth recording the reply the Society received at that time from the Ministry of Transport. It read:—

"The Minister much appreciates the interest shown by your Council and your members in the arrangements made for receiving distress messages from vessels at sea and is grateful for their offer of co-operation. After discussion with the Postmaster-General, however, he is satisfied that the normal listening watch maintained by the stations of the mobile service should be adequate in all ordinary cases to ensure that any distress message is picked up and acted on. He feels that the occasions on which it would be necessary to call on the services of Amateurs, or other members of the public would be so exceptional and, therefore, so few and far between that it would be more satisfactory not to lay down any hard and fast procedure, but to make the necessary arrangements in the light of the requirements of each individual case."

During the last few hours of January, 1953, a disaster of immense magnitude struck the coasts of the British Isles. Post Office telephones, Government wireless stations and the utility services were put out of action for days on end. Radio Amateurs in these stricken areas, ignoring the terms of their licence, but feeling sure that Public Opinion would support them, immediately placed their stations and their experience at the disposal of the authorities. In Lincolnshire, for example, when Humber radio station was put out of action by the floods, local Amateurs maintained a continuous watch on the shipping frequencies. How well they did their job no one will ever know unless an enterprising journalist has been able to drag out a story. Four times in a few hours Grimsby and Hull Radio Amateurs intercepted distress calls from ships at sea. Yet, only a few months ago they, and we, were told "that the Postmaster-General is satisfied that the normal listening watch maintained by the stations of the mobile service should be adequate in all ordinary cases to ensure that any distress message is picked up and acted upon." What, may we ask is an ordinary case?

To the average British Amateur it seems incomprehensible that the Post Office can be so short-sighted—so jealous of its rights—as to spurn genuine offers of help.

These words were penned at the height of the disaster and long before

the Council of the Society had had a further opportunity to review the situation, but we should be failing in our duty if we omitted to place on record, once again, our serious concern that no provision has yet been made by the Government to establish a National Emergency Amateur Radio Communications Service.

Is there no one in the present Government sufficiently powerful to say that the co-operation offered by the Radio Amateurs of the United Kingdom MUST BE ACCEPTED?

[The above extract from the R.S.G.B. Bulletin should inspire every able bodied Ham to have emergency equipment available for any crisis so that the authorities in Australia could never point the finger and say that the Amateurs were not prepared.—Federal Executive.]

IT COULD HAPPEN HERE!

ACCURATE FREQUENCY TRANSMISSIONS FROM VK3WI

The next Accurate Frequency Transmission will take place on Thursday evening, 21st May, 1953, on the 3.5 Mc. band. Details of the operating procedure and times of operation will be found on page 6 of the February, 1953, issue of this magazine.

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HUNTER BRANCH

The annual election of officers was held at the March meeting of the Hunter Branch. Those elected were—President: Mr. John Clarke, 2DE; Secretary: Mr. Valter Fliton, 2SF, Treasurer: Mr. Bill Hall, 3XT, Zone Officer: Mr. Les Sparkie (waiting on his call sign). Appreciation was expressed for the work of Lionel Swain, 3CB, who, by his ability as President in the past, has helped the Hunter Branch to its present position. Dave Duff, 2EO, again represented the Divisional Council and "Three" Bill also put in a welcome appearance. Max 2OT, Harold 2AHA, and Fred 2AGY gave a lecture and demonstration of v.h.f. gear.

Ernie 2PF has at last procured 40 mhz with his presence and was first contact of the Technical College Radio Club. Dave 2EZ has had good contacts from Soldiers' Point, also on 40. Bill 2AKM's "Pip Squeak" still with 59 signal. Edgar 2MR with better sig due to new rectifier he says. 2WP recognised as champion rooster catcher.

Bill 2BJ still boat building. John 2XQ building electronic key. Norm 2ANA visited Wollongong recently. Neil 2XY now has his new car. Harry 2AFA still active on 40 and 30 c.w. 2AKP heard recently on 80. Ken 2XG kept busy on t.v. activities for local h.c. station. Varley 2SF still building his modulator. Ron 2ASL relaxing after two busy years as zone officer, but always willing to render every assistance to new zone officer.

If these notes appear shorter than usual, put it down to the fact that your new scribe is making his first attempt and will improve, however, as experience is gained.

SOUTH WESTERN ZONE

Ron 2RH at Yerrinbool making radical changes to his ATs for operation on 30, 40, 50 and 15 mhz, also in the process of building a new modulator, best of luck with the change-over. Ray 2AFZ at Lenton active on 40 and 80 with a good rig. Ray has been playing with a 101 with a view to portable operation. Peter 2APZ at Montigie heard on 40 with a fine sig. he has a fine business recorder judging by the playbacks. Roy 2DO at Yass heard on 40 with his usual fine signal and modulation. Hope you get the electronic keyer working. Roy Stewart 2PL at Griffiths not heard for some time, but it should not be long now that the new rig must be nearly ready. What say Stewart?

Geoff 2BQ and Ross 2BN, of Tumut, made the trip to the Granites again on Sunday, 15th March. Had a fairly good day, some of the stations worked on 14 Mc. being 3UL, 2BW and 2AJO—sizable all ways being good copy. Alf 2BW, portable 144 Mc. at Alfred Town, was worked for the first time on 14, fine work Alf.

Not much news for the zone, so how about passing on to me what you fellows are doing some time—2AJO.

NORTH COAST AND TABLELAND ZONE

Not much in the way of news as conditions have been such as not to permit of hearing North Coast stations. We give welcome to two new Hams in the persons of 2AS3, of Murwillumbah, who incidentally quite a number will have met at Urunga, and 2AS7 in Tamworth.

The approach of the Urunga Convention brought a lot of stations on to 40 mhz that haven't been heard for quite a while, and included 2LH, 2UC, 2AWS, 2APB, and 80 mhz also produced some fine sig over the last weeks. A few travellers are passing up or down the Coast. Perc 2QV headed for Sydney, whilst 2AJZ and 2XT meandered through to Brisbane and 2ZY to Sydney. Three Bill 2AZY on the other hand is immobile due to a damaged truck. Taking lessons from Peter? A little activity is afoot on 3 mhz. Alan 2ASO now being able to put out a sig whilst 2ZY up in Murwillumbah has his beam towards Brisbane and hoping someone will answer his CQ.

Our old friend, Norm Moody, spent quite a time at Urunga prior to the Convention and managed to get a nice haul of tailer. Like several others, Urunga has him "in" and soon we may see a new shack on the water front. Crieff had the misfortune to "blow up" the power pack on his modulator, but seems to be under way again. 2AEH has fitted a crystal filter to copy some of the rare DX, whilst Perc 2QV is getting out quite well on his new 3 element rotary beam on 30. 2ACU, 2ABU, 2FH and 2XO due at Urunga early to have everything ready for the "event of the year."

VICTORIA

The April meeting was held on 1/4/53 at the usual location. This meeting was the Annual General Meeting of the Division, followed by an extra-ordinary meeting to adopt the Uniform Constitution.

The election of office-bearers resulted as follows: President, Gordon Dennis; Councillors: Fred Ball, Harry Chapman, Gordon Dennis, Jack Duncan, Col Gibson, Steve Grimsley, Len Jackson, Geo Manning. To these gentlemen go our good wishes for a successful term of office.

The recent 20 mhz tests were so well commented on that the organisers are arranging for these to be made a regular event. The population of this "City of Parks and Gardens" was greatly intrigued by the cars leading round with loops of all sizes, shapes and colours, and we, at least, attracted the attention of a patrol car. It was pleasing to see an associate member first in. Must see that guy and get a few clues.

Heard a VK3 calling VK1UZ a couple of weeks back. Listened round for a while but couldn't find him. Sorry now I didn't give the VK3 a call. 3RA showed up a few times recently after missing for eighteen months. 3AWY heard testing on 40, but didn't stay for a QSO. 3ZS on again after eight weeks shut down. Now has new v.i.o.

Have had a few visitors during the last week or so, including 3ABO, 3ALK, 3RN, 3AAF and Associate Eddie whose surname I forget. Always pleased to see anybody who calls.

Speaking of visitors still no sign of the seconds from VK3. No doubt having one in each of the pulse before coming over. If my surmise is correct, it's been there for another six months. If, on the other hand, they decided to visit "all" the churches, they are long overdue. I have been at the last VK3 Tender Night, at a shilling. I could not have lost. After all, the family has made a living from tailer for 40 years and at today's price, the profit, after paying "tax" would have paid for a 75A—well almost.

Still waiting for somebody to send me news of what is going on round the bands. Maybe some v.i.o. will help—"petite"!!

HIDDEN TRANSMITTER HUNTS

A most interesting and enjoyable afternoon was spent by those who participated in the W.I.A. Victorian Division's Hidden Transmitter Hunt on Sunday, 22nd March. 25 competitors, including many associate and student members started off in the search at 3 p.m. The first to locate the tx was Bob Hildebrand, of Moorbin. Second and third being Len 2LN and Don 2ALQ, respectively. Hildebrand's time was 44 minutes.



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The tx, a Type 3 Mk. II, running approximately 20 watts, located about a mile north of Bulla township was hidden in a large blue-stone dam under the main road. There was just enough room for the operator, get in alongside the tx, automatic keyer and battery! The aerial, a 20 ft. vertical, was fixed to a second dam on the right.

By 4 p.m. approx. 15 competitors had arrived and the tx was then closed down after an announcement was given giving the details of the location for those who were still searching. One man, who actually arrived in the vehicle first, took right past the tx and continued for quite a few minutes further on. Later on the competitors, some with their XYLs and families, and about half a dozen non-competitors arrived in the morning. In the afternoon, adjourned to the Bulla Picnic Ground for refreshments and comparing of notes. Judging from the comments, the tx was very good and families, enjoyed the event and are looking forward to the next one.

Sunday, 17th April. The location this time was the Williamsdown Gardens, 23 starters got going from the Flagstaff Gardens at 2 p.m. First to arrive at the spot was Ed 2EM who took 25 minutes to make the tx. Second was Don JALQ, whose time was 38 minutes. In third place was Jack 3VZ who he found the tx in 38 minutes. Fourth place was taken by Bob 3NZ. Len Monzer got in trouble with his car and XYL, he arrived at the location after the signal, but he got the air but that he had to open his instruction sheet to find out where the tx was).

The next hunt organised will be held on Sunday 24th April, starting at assembly place and the same time of 2 p.m. Please note the change of frequency to 1835 Kc.

Col 3FO and his willing helpers are to be thanked for their work in organizing the event.

CENTRAL WESTERN ZONE

Congratulations to the Lubbeck lads for their fine literary effort last month. It stirred up the zone to the tune of eight stations taking part in a relay, 800 m hook-up, and that is no mean effort. However, we welcome such fine turnout on Wednesday nights and hope it will improve as conditions on that band improve. The coming of winter, the first item of discussion has been the field day at Warreack which will probably be a thing of the past when you read this, but hope will be interesting to remember.

20 mX DX bounds in the zone seem to be having a time of it with some of the worst conditions for years, however, the band seems to have picked up and have burnt some midnight oil up this way to work I.A. OH. DL.

A surprise visit to Byron 3TA found him deeply engrossed with a c.r.o. What about a talk to the users of the next Convention Byron?

EASTERN ZONE

Things are very quiet about the zone these days and a general increase in activity is definitely called for. JWE is complaining about the small numbers on the zone hook-ups lately and he thinks it is time some of the chaps leave the dust out of their rigs and come on. The most notable absentee is the once regular 3PR and that is a pity. It is time to get things again just to show the boys you still know how. The rest of the Leongatha Hams are sending in the stationing cards.

After all this complaining, it is pleasing to note that 3BB has come out of retirement with Q1 again. David 3BS and Bert 3BP are back in the zone again, this time from WARD, my, you certainly get around George. JANC very busy these evenings helping the citizens at the local theatre.

There will probably be a couple of new call signs in the zone by the time this goes to print. David 3BS and Bert 3BP, Butterick, better known as the second op, of 3IZ, passed the last A.O.C.P. exam with flying colours and are keen to get things going again. What about putting a bomb under AL now John? I think there should be another bomb under there. I haven't been heard from the new location at Maryborough yet, looking forward to hearing you again Peter.

This month's meeting of the sub-branch was held at the residence of 3BS and a most interesting time was had by all. After the business had been dealt with, Alan 3AFA showed some very fine slides after which Keith 3JL introduced the meeting to the home of a friend who had a very fine radiogram and record collection for the boys to inspect. The radiogram is a 16 valve job and the audio end is a fine indeed. The speaker is set into the brick wall of his home, thus using the wall as a baffle. The overall effect is very good and is very nearly perfect.

FAR NORTH WESTERN ZONE

This month's activity has been centred round the 3 mX band with Chas 3TI and Ian 3AMJ

very busy building gear. Chas has a m.o.p.a. on the bond and Ian has converted an I.F.F. unit which is operating although to date he has been unable to make contact with Chas in the area. Max 3ZZ is getting some juice into a four element 144 Mc. beam and has been heard by 3TL.

During the last month we have had the pleasure of visits from the following Hams: 3ACI, 2DQ and 3AJI. Duden 2DQ passed through the district from Broken Hill to Melbourne. We gather he called at Ouyen and enquired at the Post Office to ascertain if there were any Hams in Ouyen. He received a negative answer and was told that Chas 3FC is busy roofing his staff up for not informing him of the enquiry. Fred 3AJI is ex-3AFC and is now located in Deniliquin. Good to see you again Fred, hope you have ironed out the trouble in your modulator. We will keep in touch with you.

Jim 3AFJ spent earlier at Ballarat and visited some of the gang in that fair city. Hope to hear you on the air on Sundays. Now that the harvest season is over, Noel 3MJB is busy with the harvest but manages to get on 14 Mc. and work the odd bit of DX. Harry 3EAT is now in the area. Bill 3AJU heard on 7 Mc. on Sundays and now has plate and screen modulation on the Type 3.

GEELONG AMATEUR RADIO CLUB

The first meeting of the month was a transmitter hunt conducted by the club. The tx was hidden at Birnie, approx. nine miles from Geelong by 3WT and J. Beckingham. Only two cars were able to find the tx. The first to arrive were Ted Blackney and Bill Zimmer, followed 15 minutes later by 3AKE with 3APK and 3ALQ. The following meeting was held on 17th April. The following members were welcomed as a member. A visitor was Mr. Stephen Aroon, who was nominated for membership. Ted Blackney and Bill Zimmer edited the Morse Instructor, Bob Wooley 3IC, for his coaching. These two members were successful in the last A.O.C.P. exam. The syllabus for the evening was a discussion on noise limiters. Each member related his experiences and results of the various types they had tried. Members of the club who took part in the tx hunt in Melbourne gave a report on the activity of the day.

SOUTH AUSTRALIA

PRO OPS BY SMD

The monthly general meeting for March, '83, was held at 17 Wymouth Street, the guest speaker was Mr. A. C. Mutton, OBE, of Alfred College, his talk was of a trip from Australia to England by ship and from Calais through France, Switzerland, Germany, Italy, thence through Austria, Germany, Holland and Belgium. Mr. Mutton showed us many photographs of the scenery, projected on a screen and the views of the lakes and snow covered mountains in Switzerland were a joy to behold. Mr. Mutton's bright and breezy commentary held all present spellbound, and some of the stories he told kept everybody present in fits of laughter; unfortunately some of the tales did not get repeated, otherwise you too could be highly amused from some of the things he saw. A hearty vote of thanks was given to Mr. Mutton for the evening and his presentation was warmly carried with acclamation by all present. We have found in VKs that it does the world of good to occasionally have a lecture right apart from Radio and Mr. Mutton's promise of some future date to come along again and deal only with London will be a lecture that will be looked forward to with great interest.

By the time these notes are printed, Melbourne will have returned to normal again after having been hit by a severe cold wave of no less a person than the President of the VKs Division in person. Whilst he was walking down Collins Street, he heard a man say to his wife, "Gee, I've seen that once before and his wife replied, "Yes, it's the same one that you see at Luna Park," which brings me to the "Scop of all scopes" (vide "Grip" with the news Parson's).

The residents of that "Nouveau riche" suburb of Rosedale Park were astounded to find that "fat muscular gentleman who lives on the corner of a certain street" was seen picking up a young lady with a very fine evening apparel (the bit that is held up by the rolls of fat around his middle) dangling under his ankles. Fortunately for him and the rest of the public, his long legs were not under the lady's feet, they should have been and saved him from an appearance in the local court. I can't give you any clues, but I will say that this is a little Audrey story.

Imitation, they say, is the sincerest form of flattery, and it was with pleasure that we read in the VKs notes, that 3JD was asked by the Melbourne meeting to advise them on the

procedure of a successful tender night, as was held in South Australia.

The new Students' Class started off with an attendance of 14 budding Hams-to-be. They were introduced to lecturers John, Allan and Arthur Sheard by the Membership Organiser, Mr. Joe McAllister. Also present to make these new chaps feel at home were the Secretary and the Treasurer and Associate representatives, Mr. C. Spatiator and Mr. Jim Paris.

Among the visitors to "The City of Churches" during the month were Jack Squire (G3J) and Malc Urquhart (6MTU). Jack is an old friend of many VKs and we hope to see more of him on his return from the Eastern States. Malc 6MTU was completing a holiday that started by ship and ended up by train. Some of Malc's remarks about the flooding so and so that abound in these Eastern States made me to believe that Malc doesn't mind paying for service, but like all of us, he hates to be phoned. Might I suggest Malc, that you spend your next holiday in an honest State. We can show you just as good scenery as they can and the majority are good honest public servants (trally rally BCA and SFO), but do not poke your nose into the B.B.S.T.S. or those Eastern blokes will seem like lambs.

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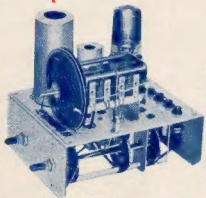
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